

WEATHER, FORECASTS AND WARNINGS.

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NORTHERN HEMISPHERE PRESSURE.

Alaska.—Lows occurred about the 4th–5th, 10th, 22d, 24th, and 28th; and highs about the 2d, 6th–7th, 13th, 16th, and 18th–19th. During the latter half of the month fluctuations were not marked.

Honolulu.—Pressure was generally low during the first decade and normal or above during the remainder of the month. Lows occurred on the 2d–3d, 4th–5th, 6th, 9th–10th, 11th–12th, 20th, 28th, and last day of the month; and highs on the 8th, 10th–11th, 12th, 15th, 17th–18th, and 22d.

Iceland.—Pressure was generally low during the first half of the month and high during the latter half. Lows occurred on the 1st, 3d, 7th–8th, 10th–11th, 14th–15th, 21st–22d, 26th–27th, and 28th; and highs on the 4th–5th, 9th, 11th–12th, 17th–18th, 25th, and last day of the month.

Azores.—Pressure averaged well above the normal for the month. Lows occurred on the 3d, 14th, 16th–17th, and 28th; and highs on the 1st, 5th, 10th, 15th, 19th–20th, and 25th.

Siberia.—Pressure averaged slightly below over northern, and slightly above normal over southern portion. Lows occurred about the 7th–8th, 10th, 15th, 22d–23d, 24th–25th, and 27th; and highs about the 6th, 8th–9th, 18th–20th, and 28th–29th. The transference of highs and lows across Siberia was not well defined.

In the United States the month opened with pressure low over the eastern and high over the western portions of the country. The high-pressure area that was over the western Plains States at the beginning of the month moved to the Atlantic coast during the two days following, causing slightly cooler weather over northern districts.

The low-pressure area which followed was in turn succeeded by a high-pressure area that was central over the northern Plains States on the morning of the 3d. It advanced eastward to the middle Atlantic coast by the evening of the 5th, causing cooler weather over northern districts.

A low-pressure area that appeared over the Canadian Northwest on the evening of the 4th moved slowly eastward to the Grand Banks by the evening of the 8th. It was attended by a troughlike formation, and showers occurred throughout the country east of the Rocky Mountains. On the 5th, storm warnings were ordered for Lake Superior and the northern portions of Lakes Michigan and Huron, and on the 6th they were extended to cover the remaining portions of Lakes Michigan and Huron and the Lower Lakes. Brisk to high winds occurred over the territory indicated.

Another high-pressure area appeared over the Canadian Northwest on the morning of the 6th, whence it moved to western Ontario during the next 24 hours with greatly increased energy, and frost warnings were issued on that date for Michigan and Wisconsin. By the morning of the 8th, the high area was over the upper Lake region, and frosts were reported in Wisconsin and Michigan and over portions of Illinois and Iowa. This high-pressure area, the most important of the month, moved slowly southeastward to the Michigan Peninsula by the morning of the 10th, and frosts were reported generally throughout the Lake region, the middle Atlantic and New England States, warnings of which had been previously disseminated.

The high area moved slowly southward to the Gulf States over which region it persisted in modified form until the 18th of the month. The southward movement of this high area caused cooler weather over the Gulf States, and from the 10th to the 13th all previous records of low temperatures for the first and second decades of June were exceeded at a number of stations in the Ohio Valley and over practically all the middle Atlantic, east Gulf, and south Atlantic States.

From the 3d to the 11th showers occurred almost daily over portions of the Gulf States.

Pressure became low over the north Pacific States on the morning of the 7th and it continued low from British Columbia to the southern Plateau until the 9th. On the 10th two low centers appeared, one over the Canadian Northwest and the other over Utah. During the next two days the southern center disappeared while the northern center moved eastward through southern Canada, and by the morning of the 14th was over the Canadian maritime Provinces, thence passing eastward during the following 24 hours to the Grand Banks. This storm caused scattered showers over the Rocky Mountain region.

On the morning of the 14th a low appeared over the Canadian Northwest and during the three days following moved across the northern tier of States to the Grand Banks, where it was central on the morning of the 17th, with pressure reading at Port au Basques, Newfoundland, 29.20 inches. Showers in connection with this storm were confined to northern States.

A high passed slowly east-southeastward from the Canadian Northwest on the 16th to a position off the middle Atlantic coast by the 19th.

By the evening of the 18th pressure had fallen over the northern Plateau and on the morning of the 20th a low center of slight intensity was over northern Illinois and a second center was over eastern Ontario. By the following morning the northern center had passed to the Maine coast, while the southern center was over Kansas. During the succeeding two days conditions remained unsettled over the central States and showers occurred over that region. By the morning of the 23d the northern low had moved to the Grand Banks, while the southern low had lost its identity.

On the morning of the 23d a low-pressure area was over the Canadian Northwest. Part of this disturbance moved slowly southward over the Plateau and disappeared, while the main center passed slowly eastward to the mouth of the St. Lawrence River by the morning of the 27th, and to the Grand Banks by the 29th, with pressure reading 29.20 inches at Sydney, Nova Scotia. This disturbance caused showers and thunderstorms from the Plains States eastward.

Following the passage of this low there was a recovery to higher pressure over the eastern half of the country from the 27th to the last of the month.

On the morning of the 24th vessel reports indicated the presence of a disturbance in the extreme western Caribbean Sea. During the following 48 hours the disturbance moved north-northwest to about latitude 25°, and longitude 89°. It thence moved about northwest until the evening of the 27th when it was off the mouth of the Rio Grande with pressure at Brownsville, Tex., 29.62 inches. By the morning of the 28th, it had passed inland over the Texas coast between Corpus Christi and

Brownsville, a maximum wind velocity of 52 miles from the southeast being reported on that morning at Corpus Christi. Advisory messages regarding the location of this storm were issued on the 26th to Gulf and Atlantic ports and on the morning of the 27th storm warnings were hoisted on the southern Texas coast.

During the 29th and 30th pressure became high over the central and northern Rocky Mountain regions, and scattered showers occurred, accompanying the movement of a low-pressure area from the Rocky Mountain region northeastward into Canada.

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since Jan. 1.	Average departures since Jan. 1.
New England.....	12	63.1	-0.5	+14.1	+2.4
Middle Atlantic.....	15	70.0	-0.0	+19.9	+3.3
South Atlantic.....	10	75.2	-0.8	+14.6	+2.4
Florida Peninsula ¹	9	73.2	-1.8	+9.4	+1.6
East Gulf.....	11	77.4	-0.6	+4.6	+0.8
West Gulf.....	11	78.2	-0.8	-5.8	-1.0
Ohio Valley and Tennessee.....	14	74.1	+0.9	+8.2	+1.4
Lower Lakes.....	11	66.4	-0.6	+8.5	+1.4
Upper Lakes.....	13	69.0	+1.9	+1.3	+0.2
North Dakota.....	9	65.9	+3.1	-0.2	0.0
Upper Mississippi Valley.....	14	73.3	+2.4	+4.6	+0.8
Missouri Valley.....	12	73.6	+2.6	+5.4	+0.9
Northern slope.....	9	63.5	+1.4	-7.6	-1.3
Middle slope.....	6	72.4	+0.5	-3.0	-0.5
Southern slope ¹	8	75.2	-1.5	-7.9	-1.3
Southern Plateau ¹	9	74.3	-2.8	-17.3	-2.9
Middle Plateau ¹	10	63.2	-1.0	-7.0	-1.2
Northern Plateau ¹	11	62.5	-1.1	-12.5	-2.1
North Pacific.....	7	58.2	+0.6	-4.6	-0.8
Middle Pacific.....	7	60.7	-1.9	-5.0	-0.8
South Pacific.....	4	65.2	-0.9	+1.3	+0.2

¹ Regular Weather Bureau and selected cooperative stations.

Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
New England.....	11	1.11	36	-2.00	-2.30
Middle Atlantic.....	15	2.24	60	-1.50	-1.70
South Atlantic.....	11	3.98	82	-0.90	-1.60
Florida Peninsula ¹	9	4.77	68	-2.20	-0.90
East Gulf.....	11	3.58	78	-1.00	+0.70
West Gulf.....	10	2.23	60	-1.50	-2.50
Ohio Valley and Tennessee.....	14	2.33	55	-1.90	+2.40
Lower Lakes.....	10	1.82	50	-1.80	+3.40
Upper Lakes.....	13	2.27	67	-1.10	-0.80
North Dakota.....	9	2.21	63	-1.30	-3.90
Upper Mississippi Valley.....	15	2.35	64	-1.60	-1.00
Missouri Valley.....	12	2.32	54	-2.00	-1.80
Northern slope.....	9	2.28	100	0.00	-0.10
Middle slope.....	6	1.95	62	-1.20	-3.30
Southern slope ¹	8	4.09	117	+0.60	-1.60
Southern Plateau ¹	9	0.90	300	+0.60	+0.20
Middle Plateau ¹	11	1.50	300	+1.00	-1.10
Northern Plateau ¹	11	2.58	190	+1.20	+0.10
North Pacific.....	7	3.67	177	+1.60	-4.80
Middle Pacific.....	7	0.33	100	0.00	-7.80
South Pacific.....	4	0.34	850	+0.30	-2.20

¹ Regular Weather Bureau and selected cooperative stations.

Average relative humidity and departure from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England.....	70	-9	Missouri Valley.....	61	-6
Middle Atlantic.....	68	-5	Northern slope.....	64	+7
South Atlantic.....	76	-2	Middle slope.....	60	0
Florida Peninsula.....	76	-4	Southern slope.....	68	+8
East Gulf.....	71	-4	Southern Plateau.....	40	+10
West Gulf.....	73	-3	Middle Plateau.....	47	+10
Ohio Valley and Tennessee.....	64	-6	Northern Plateau.....	60	+9
Lower Lakes.....	65	-6	North Pacific.....	79	+2
Upper Lakes.....	67	-6	Middle Pacific.....	69	+7
North Dakota.....	64	-4	South Pacific.....	68	+2
Upper Mississippi Valley.....	62	-8			

Average cloudiness and departure from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England.....	4.4	-0.8	Missouri Valley.....	3.7	-1.2
Middle Atlantic.....	4.4	-0.6	Northern slope.....	5.2	+0.4
South Atlantic.....	4.9	-0.1	Middle slope.....	5.2	+1.2
Florida Peninsula.....	5.5	+0.3	Southern slope.....	5.4	+1.6
East Gulf.....	4.4	-0.3	Southern Plateau.....	2.6	+0.6
West Gulf.....	4.5	+0.2	Middle Plateau.....	4.5	+1.2
Ohio Valley and Tennessee.....	3.7	-1.3	Northern Plateau.....	6.1	+1.5
Lower Lakes.....	3.4	-1.5	North Pacific.....	6.2	+0.1
Upper Lakes.....	3.8	-1.3	Middle Pacific.....	4.0	+0.7
North Dakota.....	3.6	-1.8	South Pacific.....	4.3	+1.0
Upper Mississippi Valley.....	3.9	-1.1			

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Atlanta, Ga.....	22	64	sw.	Mount Tamalpais, Cal.....	25	67	nw.
Bismarck, N. Dak.....	14	50	nw.	Do.....	26	53	nw.
Cleveland, Ohio.....	10	64	sw.	Do.....	27	52	nw.
Columbus, Ohio.....	1	60	nw.	Pittsburgh, Pa.....	20	52	nw.
Do.....	18	52	ne.	Point Reyes Light, Cal.....	3	53	nw.
Corpus Christi, Tex.....	28	50	se.	Do.....	4	54	nw.
Detroit, Mich.....	19	69	nw.	Do.....	10	74	nw.
El Paso, Tex.....	1	50	se.	Do.....	11	62	nw.
Helena, Mont.....	8	52	s.	Do.....	12	50	nw.
Do.....	17	51	sw.	Do.....	14	53	nw.
Lincoln, Nebr.....	1	56	nw.	Do.....	15	50	nw.
Louisville, Ky.....	17	56	nw.	Do.....	20	67	nw.
Memphis, Tenn.....	6	52	nw.	Do.....	24	50	nw.
Minneapolis, Minn.....	17	61	nw.	Do.....	25	53	nw.
Modena, Utah.....	26	54	sw.	Do.....	27	55	nw.
Mount Tamalpais, Cal.....	9	72	nw.	Do.....	30	62	nw.
Do.....	12	62	nw.	St. Paul, Minn.....	17	64	nw.
Do.....	13	69	nw.	Terre Haute, Ind.....	15	50	ne.
Do.....	14	74	nw.	Trenton, N. J.....	20	54	nw.
Do.....	20	60	n.	Williston, N. Dak.....	14	64	nw.
Do.....	21	60	n.				
Do.....	24	72	nw.				